

IV. AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A control valve for a variable capacity compressor, which comprises

a bellows main body retained as a pressure sensing element in a bellows case with an airtight structure and transfers expansion and contraction of the bellows main body in response to a variation in inlet pressure of the variable capacity compressor to a valve element through a valve rod supported to be movable in a valve lifting direction from a valve housing integral with the bellows case to thereby change a valve opening degree,

wherein a patch member is provided to a movable-side end portion of the bellows main body and is formed with a fitting recessed portion defining a valve-end receiving chamber extending in the valve lifting direction, a ~~connecting~~contacting end portion of the valve rod being fitted to be able to float in the fitting recessed portion,

wherein an edge of the ~~connecting~~contacting end portion of the valve rod is roundly or hemispherically shaped, and

wherein the fitting recessed portion is formed such that the patch member can be tilted with respect to the valve rod, and

wherein a compression coil spring is disposed between the patch member and a lower patch member for supporting a fixed-side end portion of the bellows main body, and

wherein the valve housing is formed with a valve rod retaining hole formed therethrough and sized to slidably receive the valve rod in a close-fitting relationship so that ~~one~~a valve contacting end portion of the valve rod contacts the valve element while the ~~contact~~contacting end portion of the valve rod disposed opposite the ~~one~~valve contacting end portion of the valve rod contacts the fitting recessed portion, the ~~contact~~contacting end portion of the valve rod is sized to be received in the valve-end receiving chamber of the fitting recessed portion ~~in a close-fitting relationship~~.

2. (Currently Amended) The control valve for a variable capacity compressor according to claim 1, wherein the ~~contact~~contacting end portion of the valve rod in contact with the fitting recessed portion is in a substantially central position in a bellows expanding/contracting direction of the bellows main body or on the fixed-side end portion side of the central position.

3. (Withdrawn) The control valve for a variable capacity compressor according to claim 1, wherein an inner face of the fixed-side end portion of the bellows main body is supported on the lower patch member, an outer face of the fixed-side end portion is supported on an adjusting screw member provided to the bellows case, and a side face of the fixed-side end portion of the bellows main body is supported on an inner face of the bellows case.

4. (Original) The control valve for a variable capacity compressor according to claim 1, wherein a bottom portion of the fitting recessed portion forms a stopper face portion which can come in contact with a stopper face portion formed at a central portion of the lower patch member.

5. (Original) The control valve for a variable capacity compressor according to claim 1, wherein the fixed-side end portion of the bellows main body is mounted to the lower patch member substantially in the same shape as the patch member, a side face of the lower patch member is supported on a support tube portion formed to stand from the bellows case, and a stopper face portion formed at a central portion of the lower patch member is supported on a support portion extending from an adjusting screw member.

6. (Withdrawn) The control valve for a variable capacity compressor according to claim 1, wherein a ball is mounted in the fitting recessed portion and the valve rod is fitted to be able to float in the fitting recessed portion with a lower end of the valve rod in contact with the ball.